

Miami-Dade Water and Sewer Department

Fiscal Years: 2005-2006 & 2006-2007

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- Empower the community by increasing communication and coordination with local, state, and federal agencies (NU-2).
- Promote responsible stewardship of natural resources and unique community environments (NU-3).
- Provide timely and reliable public infrastructure services including road maintenance, storm water, solid waste and wastewater management, and a safe and clean water delivery system consistent with the Comprehensive Development Master Plan (NU-6).
- Ensure the financial viability of Miami-Dade through sound financial management practices (ES-8).

EXECUTIVE SUMMARY

Miami-Dade Water and Sewer Department principal responsibilities are water transmission, treatment, and distribution; and sewer collection, treatment and disposal.

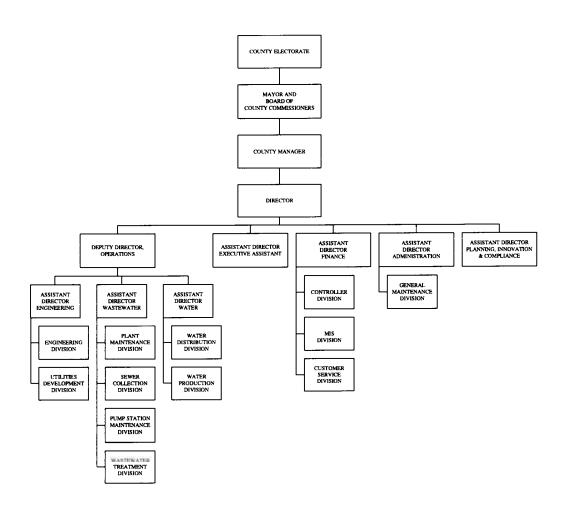
The Department is one of the largest public utilities in the United States; and currently serves approximately 407,600 retail water customers and 322,500 retail wastewater customers. In addition, wholesale water service is provided to 15, and wholesale sewer service to 12, of Miami-Dade County's 35 municipalities and sewer service to Homestead Air Force Base. In terms of population this represents about 2.3 million residents.

The Department operates three regional water treatment plants (WTPs) and five smaller plants, with a total rated treatment capacity of 454 million gallons per day (MGD). The Department also operates three regional wastewater treatment plants (WWTPs), with a total rated capacity of 352 MGD. In addition to the treatment plants, the Department operates and maintains:

- 88 water supply wells in the Biscayne Aquifer, grouped in 14 wellfields
- 5 aquifer storage and recovery (ASR) wells, in the Floridan Aquifer
- 992 sewer pump stations
- 7,400 miles of water distribution pipes
- 3,700 miles of sewer collection pipes

Table of Organization

MIAMI-DADE WATER & SEWER DEPARTMENT ORGANIZATIONAL CHART



Department Name: Miami-Dade Water and Sewer Department

Fiscal Years: 2005/2006 - 2006/2007

The following is a summary of the major programs, initiatives, and milestones anticipated for FY 06 and FY 07:

- Continue replacement of aging water and sewer infrastructure.
- Continue implementation of:
 - Water and Wastewater Facilities Master Plans
 - South District Wastewater Treatment Plant Consent Order
 - Peak Flow projects in accordance with the Wastewater Facilities Master Plan
 - o Lateral Pilot Program
 - o POWER Program
 - Water Conservation Program
 - Consent Decrees and Settlement Agreements
- Work with Florida Department of Environmental Protection (FDEP) to obtain approval for the Water and Wastewater Facilities Master Plans, as a requirement to obtain State Revolving Fund (SRF) low interest loans.
- Complete the Biosolids Master Plan update, Odor Control, and Reuse Feasibility Study.
- Select consultant to design 72-inch Raw Water Main and the Aquifer Storage Recovery wells for the Hialeah/Preston Water Treatment Plant.
- Complete the design of the South Miami Heights new water treatment plant to serve south Miami-Dade County and select consultants to provide construction management services.
- Conduct a 2006 Customer Service Survey.
- Continue improvements to the Plans Review and New Business Offices to improve and expedite processes for new development.
- Continue to maintain Infrastructure Improvement Projects (IIE) layer to reflect engineering projects.
- Continue to provide input for improvements to the Customer Information System (CIS).
- Complete the implementation of the Enterprise Resource Planning (ERP) integrated financial system.
- Continue to receive the Certificate for the Comprehensive Annual Financial Report (CAFR).
- Update the Department's Strategic Plan.

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 Complete the 2005 Governor's Sterling Challenge. Review the Sterling Feedback Report and implement applicable recommendations.

- Continue compliance with remaining Consent Decree and Settlement Agreement (CD/SA) required tasks and the South Dade Wastewater Treatment Plant (SDWWTP) Consent Order.
- Complete the revisions to Construction Management policies.
- Continue meetings with wholesale customers.
- Continue and expand quality assurance review of department.
- Continue to work with the Audit and Management Services and Office of the Inspector General to implement audit recommendations.

Summary of Critical Success Factors

- Hire and retain qualified staff
- Obtain regulatory approvals and maintain regulatory compliance
- Procure services
- Increase revenues
- Obtain allocation for an adequate water supply to meet demands.
- Receive a proposal for funding treatment improvements for the water supply from the NWWF.
- Maintain regulatory requirements.

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Vision Statement

The Miami-Dade Water and Sewer Department will be a utility that is a leader in providing public health protection and environmentally sound and innovative utility services using state-of-the-art technologies, proven operational expertise, resource planning and excellent customer service in a cost-effective manner.

Mission Statement

The Miami-Dade Water and Sewer Department is committed to serving the needs of Miami-Dade County residents, businesses, and visitors by providing high-quality drinking water and wastewater disposal services while providing for future economic growth via progressive planning; implementing water conservation measures; safeguarding public health and the environment; and providing for continuous process improvements and cost efficiencies.

Departmental Business Plan and Outlook
Department Name: Miami-Dade Water and Sewer Department

Fiscal Years: 2005/2006 - 2006/2007

Department Description

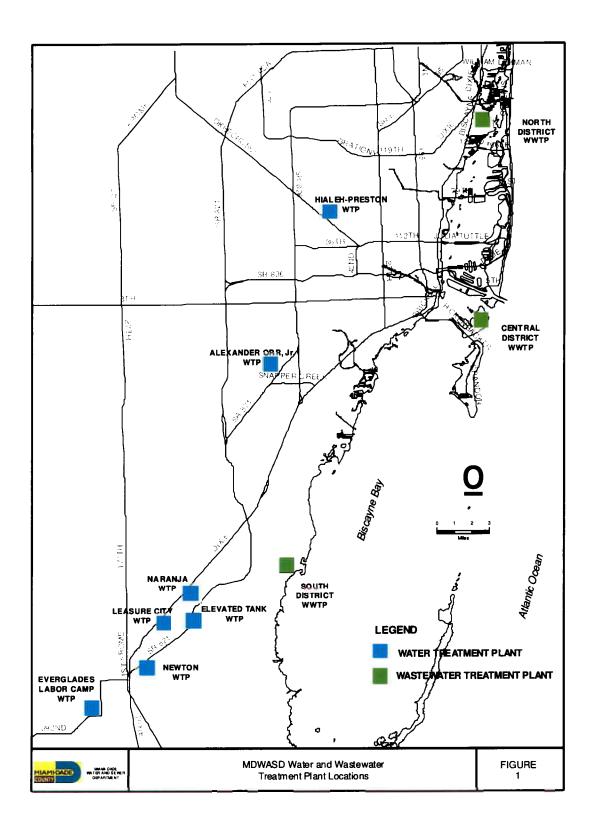
In December 1972, the Board of County Commissioners (the Board) of Miami-Dade County, Florida (the County) created the Miami-Dade Water and Sewer Authority (the Authority) for the purpose of establishing an agency responsible for providing water and wastewater services throughout the County. In 1973, all properties of the water and wastewater systems of the City of Miami and of the County were placed under the control of the Authority. The Board changed the status of the Authority to that of a County department effective November 1, 1983. Under the provisions of Miami-Dade County Ordinance 83-92, which directed the transition, the Authority was established as the "Miami-Dade Water and Sewer Authority Department ("the Department")." On October 19, 1993, the Department changed its name to the Miami-Dade Water and Sewer Department. The principal responsibilities of the Department are water transmission, treatment, and distribution; and sewer collection, treatment, and disposal.

The Department is ranked as the sixth largest public utility in the United States, and currently serves approximately 407,600 retail water customers and 322,500 retail wastewater customers. In addition, wholesale water service is provided to 15, and wholesale sewer service to 12, of Miami-Dade County's 35 municipalities and sewer services to Homestead Air Force Base. In terms of population this represents about 2.2 million residents.

The Department operates three regional water treatment plants (WTPs): the Hialeah, Preston and Alex Orr, Jr, WTPs; and five smaller plants in the southern part of the County, with a total rated treatment capacity of 454 million gallons per day (MGD). The water supply for these plants comes from the Biscayne Aquifer through 88 water supply wells, located in 14 separate wellfields. The regional plants use lime softening and disinfection with chlorine as the principal treatment. In addition, at the West and Southwest wellfields, aquifer storage and recovery (ASR) wells are used to store excess water in the wet season and the water is recovered in the dry season to supplement the higher demands. The water distribution system consists of 7,400 miles of pipes.

The Department also operates three regional wastewater treatment plants (WWTPs): the North, Central, and South District WWTPs; with a total rated capacity of 368 MGD. The North and Central District WWTPs discharge the treated wastewater through deep ocean outfalls and the South District WWTP uses deep injection wells. At the North District WWTP four injection wells have been constructed and are undergoing operational testing. The three WWTPs treat the wastewater to secondary treatment standards and part of the treated effluent is used for process water or further treated to use for irrigation within the treatment plant. At the North District WWTP, about 100,000 gallons of wastewater per day are treated to tertiary treatment levels and used for irrigation of the Florida International University North Campus. The wastewater collection system consists of 992 sewer pump stations and 3,700 miles of pipes.

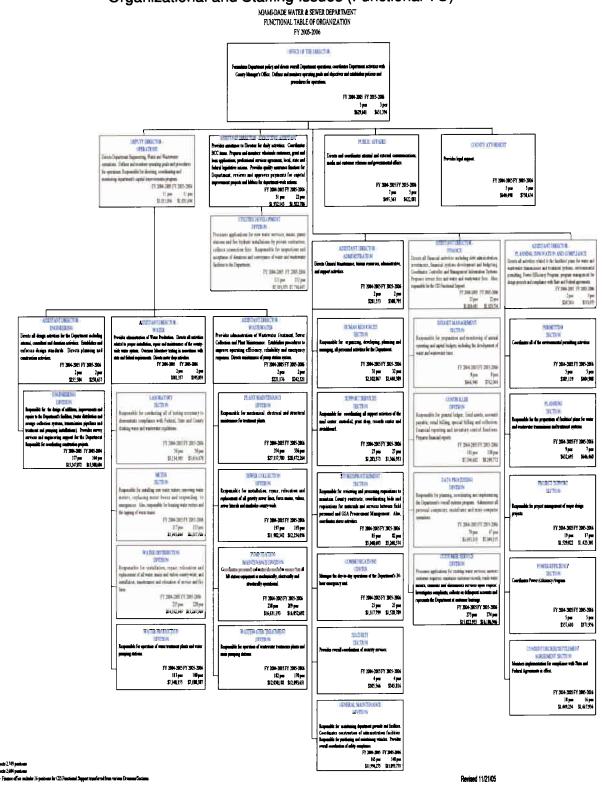
The location of the WTPs and WWTPs is shown in Figure 1 on page 8.



Department Name: Miami-Dade Water and Sewer Department

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Organizational and Staffing Issues (Functional TO)



Staffing Levels:

3	FY 04-05	FY 04-05	FY 05-06	FY 05-06
Functional Unit	Positions	Budget	Positions	Budget

Director's Office	3	\$629,641	3	\$651,394
Deputy Director - Operations	11	1,011,096	11	1,031,694
County Attorneys'	5	640,498	5	758,634
Public Affairs	7	497,363	5	422,081
Assistant Director - Executive Assistant	31	1,932,143	22	1,922,786
Utilities Development Division	111	7,303,073	111	7,730,497
Assistant Director - Administration	2	281,553	2	308,795
General Maintenance Division	165	11,994,275	148	11,893,733
Human Resources Section	31	2,102,867	32	2,440,389
Support Services Section	27	1,283,573	27	1,366,933
Stores/Procurement Section	85	5,048,693	82	5,240,574
Communications Center	25	1,317,799	25	1,528,789
Security Section	4	305,566	4	345,816
Assistant Director Engineering	2	255,584	2	258,637
Engineering Division	177	13,247,872	160	13,588,684
Assistant Director Finance	23	1,824,485	22	1,929,734
Controller Division	141	7,594,602	138	8,189,772
Data Processing Division	70	6,693,310	67	7,049,195
Customer Service Division	273	15,022,955	274	16,186,946
Budget Management Section	8	666,944	8	762,044
Assistant - Director Planning, Innovation and			_	
Compliance	2	247,816	3	333,079
Permitting Section	5	385,119	5	404,908
Planning Section	9	632,695	7	646,460
POWER/Efficiency Section	5	357,610	5	371,956
Project Support Section	19	1,529,022	17	1,423,301
Consent Decree/Settlement Agreement	18	1,449,234	16	1,617,936
Assistant Director - Wastewater	2	221,176	2	242,321
Plant Maintenance Division	354	27,357,780	336	28,472,264
Sewer Collection Division	197	11,982,542	193	12,254,056
Pump Station Maintenance Division	238	16,631,193	209	16,052,692
Wastewater Treatment Division	182	12,030,181	170	12,093,651
Assistant Director Water	2	581,357	2	595,059
Water Distribution Division	235	14,512,949	228	15,267,969
Water Production Division	113	7,140,155	100	7,188,387
Laboratory Section	50	3,134,905	50	3,414,478
Meter Section	117	5,943,044	113	6,357,706
Total	2,749	\$183,790,670	2,604	\$190,343,350

Department Name: Miami-Dade Water and Sewer Department

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The Department currently provides the following major services and programs:

- Wastewater collection, treatment, and disposal; meeting all Local, State, and Federal requirements.
- Water transmission, treatment, and distribution; meeting all Local, State, and Federal requirements.
- Maintain all the treatment plants and general facilities.
- Water and Wastewater facilities long-term planning.
- Design, construction, and inspection of projects required to provide adequate level of service.
- Pump Station Improvements Program
- Infiltration and Inflow Reduction Program
- Leak Detection Program
- Water Conservation Program
- POWER Efficiency Program
- Effluent Reuse Program
- Wastewater Residuals Reuse Program
- Customer service to the more than 400,000 customer accounts
- Financial accounting and reporting services for the Department
- Information technology support for the Department
- Employee training and development
- Comprehensive safety program
- Consent Decree/Settlement Agreement (CD/SA) Program Management
- Environmental compliance monitoring.
- Provide input to various federal and state agencies in the development of new regulations.

Departmental Business Plan and Outlook
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• Maintain all federal and state operating permits in good standing.

- Maintain good relations and frequent contact with all regulatory bodies that affect the Department.
- Billing services to various municipalities for storm water services.
- Maintain relations with wholesale customers through scheduled meetings and continuous communications.
- Update rules and regulations to ensure appropriate levels of customer service.
- Staff Infill Development Committee to ensure appropriate and cost effective development of infill areas.
- Receive federal and state financial assistance for water and sewer capital improvements.
- Maintain all operating local and federal permits in good standing.

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Revenues and Expenditures by Fund

(All Dollars In Thousands)					
	FY 2004-2005 Actual	FY 2005-2006 Budget	Projection for FY 2005-2006		
Revenues	\$474,822	\$557,697	\$539,390		
Operating Expenditures	\$258,380	\$292,867	\$293,524		
Non-Operating Expenditures	\$43,682	\$54,411	\$54,284		
Transfers To Other Funds	\$172,760	\$210,419	\$191,582		
Total Expenditures	\$474,822	\$557,697	\$539,390		
Revenues Less Expenditures	\$0	\$0	\$0		

Footnotes on Department Revenues and Expenditures:

FY 2004-2005 Actual and FY 2005-2006 Projection are subject to revisions.

FY 2005-2006 Budgeted Revenues are shown at 95% of amount reasonably anticipated.

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Equity in pooled cash (for proprietary funds only)

(All Dollars In Thousands)					
Fund	Prior Year 2004-2005 Year-End	FY 2005-2006 Budget	Current FY 2005-2006 Projected Year-End Balances		
Construction Funds	\$510,087	\$348,772	\$500,402		
Total	\$510,087	\$348,772	\$500,402		

Footnotes on Water and Wastewater Construction Fund Balances:

The Water and Wastewater Construction Funds above include the following: Bond Construction Funds, Plant Expansion Funds, State Revolving Funds, Renewal and Replacement Funds, Special Construction Funds and Fire Hydrant Fund.

Business Environment

The Department serves approximately 407,500 retail water customers and 322,500 retail wastewater customers. In addition, wholesale water services is provided to 15, and wholesale sewer service to 12, of Miami-Dade County's 35 municipalities and sewer services to Homestead Air Force Base. In terms of population, this represents about 2.3 million residents. The County continues to experience significant growth. The population is anticipated to grow 6.2% from 2005 to 2010.

The following is a summary of the Department's Financial Environment:

- Regulated rates established by the Board of County Commissioners that are extremely competitive. In fact, WASD rates are among the lowest rates throughout the country.
- Exclusive rights to providing retail water and sewer services to the majority of the population of Miami-Dade County.
- Operate with an enterprise fund department that receives the majority of its revenues
 from rates and fees charged to its retail and wholesale customers. For the future, the
 Department plans to adjust retail rates as approved by the Board of County
 Commissioners based on a "Maintenance Index", except when conditions demand
 the need for higher rate increases. Wholesale rates are planned to be adjusted
 annually in accordance with the wholesale contracts which require that Department
 recover costs and capital requirements based on projected annual needs.
- Effective October 1, 2005, various Department's rates were increased to produce an over all 15 percent increase in revenues to recover the Utility system's requirements. The retail rate impact for the averaged combined water and sewer customer using 7,500 gallons monthly will be \$2.78 or 8.67%. In addition to the increase in rates, the Board of County Commissioners approved the creation of a water and sewer "Maintenance Index" to adjust rates annually to provide additional revenues to recover increases in the Utility system's requirements. The water and sewer Maintenance Index can not exceed the Bureau of Labor Statistics "Water and Sewerage CPI" and will be included as an index in the Department's annual budget. For wholesale rates, the Board instructed the Department to meet with the wholesale customer to confirm the rate changes prior to implementation on January 1, 2006. The Department has held meetings with the wholesale customers and based on those meetings, revisions to the approved wholesale rates will be implemented January 1, 2006. The revisions to the wholesale rates will reduce the projected revenues to be recovered approximately \$6 million or 1.4% of total operating revenues.
- The Department has more than \$1.7 billion of outstanding revenue bonds and loans that are rated as A1 or A+.

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• The Department's Water and Wastewater Multi-Year Capital Improvement Plan has identified more than \$2.2 billion of future capital projects.

- The Department is considered a leader in the water and wastewater industry.
- Independent survey results indicate that customers are highly satisfied with the level
 of services provided by the Department. Customers are satisfied with the technology
 improvements for interacting with the Department, including the "On-line" bill
 payment option.

The following is a summary of the Department's Regulatory Environment:

- The Department's operations are regulated by the United States Environmental Protection Agency (USEPA), the Florida Department of Environmental Protection (FDEP), and the Miami-Dade County Department of Environmental Resources Management (DERM).
- In the early nineties, the Department entered into two Consent Decrees with the USEPA and two Settlement agreements with the FDEP. The Department established the CD/SA Program to ensure compliance with these decrees and orders. The Department continues complying with these agreements and has completed 1,470 milestones set forth in these enforcements actions and has not incurred any penalties as a result of not meeting these deadlines.
- On July 22, 2003, the Board approved a new Consent Order (CO) entered into between the State of Florida and the County, to address wastewater disposal at the South District Wastewater Treatment Plant (SDWWTP). The new CO requires upgrade of the treatment at the plant and provides for expansion of the treatment and disposal capacity to meet future growth. The CO became effective on April 29, 2004. The Department has already completed 172 milestones.
- The CO also calls for the State to provide the Department with up to \$100 million in low-interest loans for the required capital improvements. For the next five years, the Department will be designing and constructing the facilities required under the CO.
- In November 2005, the USEPA published a new Underground Injection Control rule, which will impact the upgrade of the treatment at the SDWWTP. This rule requires that the upgrade of the treatment be completed by December 22, 2010.
- At the Preston Water Treatment Plant, the Department is currently completing construction of treatment enhancements to meet new federal regulations addressing disinfection byproducts.

It is anticipated that the ESEPA will publish two new major drinking water rules (Stage 2 Disinfectants and Disinfection Byproducts Rules, and Long Term 2 Enhanced Surface Water Rule) in by the end of December 2005. The Department has previously evaluated the draft rules and had developed an implementation plan.

Customer Feedback Plan

The department conducted a customer satisfaction survey in 2003. A similar customer survey will be conducted in 2006 to document differences based on the implementation of various new initiatives including a determination regarding the public's opinion towards monthly billing. Customer Service supervisors have partially implemented a random call back program. Each day, the Communications Center is provided with a spreadsheet of the connections, transfers, turn-ons and turn-offs that have been conducted. From this list, Communications employees call the customers and ask them a series of five questions to elicit their impression of the quality of MDWASD's customer service. These spreadsheets are provided to Communications by a "shared environment" system in which no physical paper is produced.

Customer Service supervisors have also made a concerted effort to survey new customers who have opened an account to ascertain their satisfaction level regarding contact with the department. This surveying mechanism has been in place since August 2005. Additional public education about department services, odors, and taste has been strengthened via written material and infomercials on MDTV.

Critical Success Factors

The following is a brief list of issues which are critical to the successful implementation of this Business Plan:

- Ability to hire qualified staff to provide:
 - Improved customer service
 - o Increased O & M
 - Proper and timely planning and financial information
 - Proper management of the capital improvement program
- Ability to obtain regulatory approval for:
 - Long term water allocation permit to meet projected water demands.
 - Operation permits for existing ASR wells to meet water supply demands in the dry season.
 - o Wastewater Facilities Master Plan including Interim Peak Flow Study.
 - Construction permits for Wastewater Phase I projects, and wet weather treatment facilities.
 - Alternative disinfection process at the South District Wastewater Treatment Plant.
- Ability to:
 - Hire consultants expeditiously
 - Access vendors to maintain equipment, especially sole source ones
 - o Implement succession planning to replace experienced personnel
 - o Reduce institutional barriers (Procurement, Personnel, Fleet)

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Ability to obtain future rate increase to meet the financial obligations, implementation
of the Multi-Year Capital Plan (MYCP) and a reasonable level of R&R.

- Availability of GOB funds
- Implementation of EAMS
- Implementation of ERP
- Limitation of mandated policies that are County-wide (i.e. Hiring Freeze, Fleet reductions)
- Ability to have an adequate water supply to meet demands; through the U.S. Army Corps of Engineer (USACE) and the South Florida Water Management District (SFWMD), successful implementation of the Comprehensive Everglades Restoration Plan (CERP), which will create additional water resources for Southeast Florida.

Future Outlook

The following are future year task/activities/programs required to achieve Strategic Plan objectives

- Implementation of the Water and Wastewater Facilities Master Plans, which are part of the MYCP.
- Adjustment of revenues to meet financial obligations.
- Improvement of the water conservation program to enhance water availability.
- Expansion of the Aquifer Storage Recovery Program.
- Implementation of wastewater reuse.
- Seek an adequate revenue stream, which is critical to the success of the Department to maintain proper reserves and meet debt service coverage in accordance with the Master Bond Ordinance (93-134).
- Seek approval for additional staff.
- Continue to study and evaluate renewal and replacement needs, and benchmark with other utilities.
- Increase implementation of new technologies.
- Implementation of a Project Control Tracking System (PCTS).
- Increase high level management support and buy into process.

Department Name: Miami-Dade Water and Sewer Department

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THE PLAN

Overview

Our FY 2005/06 – 2006-07 business plan draws heavily on previously adopted work including the Miami-Dade County Strategic Plan. Miami-Dade County's Strategic Planning initiative is both a plan and a process. The plan provides a framework at a broad Countywide level where we want to go, how we get there, and how we measure our progress along the way. The process ensures increased communications at all levels of County government using consistent terms.

- Our Countywide Vision of "delivering excellence every day" communicates the community's shared vision for the best possible future for Miami-Dade County government.
- Our Countywide Mission statement communicates the role of our government.
 Miami-Dade County's mission statement is "delivering excellent public services that address our community's needs and enhance our quality of life".
- o Our *Guiding Principles* communicate to all levels of our organization the manner in which we expect all decisions, interactions and activities to be performed.
- o Our Strategic Themes represent what we consider to be the most significant challenges and opportunities facing Miami-Dade County government.
- We have developed Goals across all County Departments. These goals provide
 the direction the County must move in to address the priority strategic themes and
 help guide us towards the desired future.
- For each goal we have defined a desired Outcome or set of outcomes that the County must achieve to be successful in accomplishing the goal. These outcomes are from the customer/community perspective (e.g. quality of service provided, customer satisfaction).
- o For each outcome(s), implementing *Strategies* summarize at a broad countywide level the actions that will be taken to achieve the outcome(s).
- Key Performance Indicators are the measures that express the County's intentions from the Strategic Plan. Associated Key Performance Objectives assign measurable targets and timelines to the key performance indicators while the Performance Measure is the specific unit of measure. Departments may develop Additional Performance Objectives.
- Department Programs/Initiatives (may include activities and tasks) are actions or groups of actions that will be undertaken by a particular department in a specific fiscal year in order to implement a strategy.

Department Name: Miami-Dade Water and Sewer Department

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As part of the County's Strategic Plan, the Board of County Commissioners endorsed nine priority strategic themes countywide. This Department is primarily supportive of the following strategic themes:

- Ensure Miami-Dade County operates in a fiscally responsible and stable manner
- Improve the quality of life for all County residents
- Continuously improve the performance and capabilities of County operations by maximizing technology, fostering innovation, and increasing access to and information regarding services
- Protect and preserve our unique environment
- Promote cooperation and coordination among all government services

Supporting these themes are supporting goals and priority outcomes that directly relate to this department. These are provided along with the Department's Programs, Initiatives, and Performance Measures for fiscal year 2006.

Department-related Strategic Plan Goals:

- Empower the community by increasing communication and coordination with local, state, and federal agencies (NU-2).
- Promote responsible stewardship of natural resources and unique community environments (NU-3).
- Provide timely and reliable public infrastructure services including road maintenance, storm water, solid waste and wastewater management, and a safe and clean water delivery system consistent with the Comprehensive Development Master Plan (NU-6).
- Ensure the financial viability of Miami-Dade County through sound financial management practices (ES-8).

Department-related Strategic Plan Priority Outcomes:

- Improved community access to information and services.
- Well-trained, customer-friendly county government workforce.
- Improve infrastructure and redevelopment to attract business to under served and distressed areas.
- Customer-friendly environment for regulated business and entities doing business with Miami-Dade County.
- Protection of water quality and improved water pressure.